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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,758	08/20/2002	Malte Neuss	THIE.0009	4917
7590 09/08/2004			EXAMINER	
Reed Smith Hazel & Thomas Suite 1400 3110 Fairview Park Drive Falls Church, VA 22042			STEWART, ALVIN J	
			ART UNIT	PAPER NUMBER
			3738	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/806,758

Applicant(s)

NEUSS ET AL.

Examiner

Alvin J Stewart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the 10 to 50% smaller than the width of a strait bar is not shown in the specification. The applicant has to enter the 10%-50% in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 25-28, 33-35 and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Cox US Patent 6,461,380 B1.

Cox discloses a stent comprising a plurality of coupled flexible zigzag annular elements (72) connected to each other by a plurality of bending elements having a bow shaped connector bars (78). Figure 3, shows bars having a width that is about 20% smaller than the width of a strait formed connector bar of the annular elements.

Regarding the star shaped segment, the above reference is capable of disclosing a star shaped segment when the stent is in the expanded position. Fig. 3 discloses the stent in the compressed position but it is well known in the art when the stent struts start to expand the areas that are abutting each other will begin to separate from each other, therefore, forming a star shaped segment (see attachment).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox US Patent 6,461,380 B1 in view of Klein US Patent 6,602,281 B1.

Cox discloses the invention substantially as claimed. However, Cox does not disclose connector bars having a width greater on the proximal and distal ends than in the middle of the stent.

Klein teaches connector bars (see attachment) capable of having a width greater on the proximal and distal ends than in the middle of the stent for the purpose of increasing the radial stiffness at the ends of the stent to minimize flaring (see Figs. 2, 12 and 13 and col. 12, lines 55-67).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Cox reference with the no flaring stent of Klein in order to increase the radial stiffness at the ends of the stent to minimize flaring.

Claims 31, 32, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox US Patent 6,461,380 B1 in view of Richter US Patent 5,807,404.

Cox discloses the invention substantially as claimed. However, Cox does not disclose a width of bow bars in the middle section is greater than on the proximal and distal ends and does not disclose a stent made of self-expandable nickel-titanium.

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Richter teaches a self-expandable stent (see col. 5, lines 42-47) having connecting bars having a width smaller at the proximal and distal ends than in the middle of the stent for the purpose of correcting undesired effects at singular points and provide for a better fit to a vessel (see col. 8, lines 1-30).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the material property and the bars width at the proximal and distal ends of the Cox reference with the material property and width of the Richter reference in order to correct undesired effects at singular points and provide for a better fit to a vessel.

Claims 38-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox US Patent 6,461,380 B1 in view of Wright et al US Patent 6,273,913 B1.

Cox discloses the invention substantially as claimed. However, Cox does not disclose resorbable material, polyester, drugs, and radioactive materials.

Wright et al teaches a stent having a plurality of coatings (e.g. coatings having resorbable materials (see col. 7, lines 2-8), polyester (see col. 6, lines 28-31), drugs (see col. 6, lines 25-28), and radioactive materials (see col. 5, line 19)) for the purpose of preventing inflammation and the proliferation of smooth muscle cells by providing a controlled diffusion of drugs from the stent to the artery wall (see col. 3, lines 48-52 and col. 5, lines 53-57).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Cox stent with the plurality of coatings of the Wright et al reference in order to prevent the inflammation and the proliferation of smooth muscle cells by providing a controlled diffusion of drugs from the stent to the artery wall.

Response to Arguments

Applicant's arguments filed April 29, 2004 have been fully considered but they are not persuasive.

Specification:

Page 2, lines 31 to 33 disclose only a reduce cross section of about 30%, nowhere in that paragraph discloses a range of 10 to 50 percent. Applicant has to enter the 10 to 50 % in the specification in order to overcome the objection.

Claims:

The Examiner maintains the previous rejection because the Examiner still believes that US Patent 5,646,380 reads on the new limitations entered by the Applicant's representative. As discloses in the rejection the examiner believes that the shaded area shown in the attachment is capable of having a star shaped segment when the stent is in the expanded position.

Regarding the bow shaped connector bars, the Examiner has interpreted element 78 as the bow shaped connector bars.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin J Stewart whose telephone number is 703-305-0277. The examiner can normally be reached on Monday-Friday 7:00AM-5:30PM(1 Friday B-week off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on 703-308-2111. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A. Stewart
Alvin J Stewart
Primary Examiner
Art Unit 3738

September 03, 2004.